

LA-UR-18-28251

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Title: NPDES Permit No. NM0028355, Final Report for DQA Study 38

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Intended for: Report

Issued: 2018-08-29





Environmental Protection & Compliance Division Environmental Compliance Programs PO Box 1663, K490 Los Alamos, New Mexico 87545 (505) 667-0666

Date:

Symbol: EPC-DO: 18-XXX

LAUR: 18-XXXXX

Locates Action No.: N/A

Ms. Barbara Cooney Surface Water Quality Bureau New Mexico Environment Department Harold Runnels Building, Room N2261 1190 St. Francis Drive P.O. Box 26110 Santa Fe, NM 87502

SUBJECT: NPDES Permit No. NM0028355, Final Report for DQA Study 38

Dear Ms. Cooney:

The United States Environmental Protection Agency (USEPA) kicked off Discharge Monitoring Report-Quality Assurance (DMR-QA) Study 38 on March 1, 2018. The study was concluded on July 6, 2018. DMR-QA Study 38 results is included in Enclosure 1 and include the results for New Mexico Water Testing Laboratory, GEL, Los Alamos National Laboratory, and Pacific Eco Risk. Non-acceptable results are noted and a corrective action plan is being developed to address deficiencies associated with the testing and will be submitted once completed.

Please contact Patricia Vardaro-Charles at (505) 665-4644 or Michael T. Saladen at (505) 665-6085 of the Environmental Compliance Programs (EPC-CP) Group if you have questions.

Sincerely,

Taunia S. Van Valkenburg Group Leader



Ms. Nancy Williams EPC-DO: 18-273

TVV:MTS:PVC:cmh

Enclosures: 1) NPDES Permit No. NM0028355, Final Report for DQA Study 38

Copy: Barbara Cooney, NMED/SWQB, Santa Fe, NM, (Hard Copy) (E-File)

Magda Dallemagne, USEPA Region 6, Dallas Texas (E-File) Nancy Williams, USEPA Region 6, Dallas Texas (E-File) Sarah Holcomb, NMED/SWQB, Santa Fe, NM, (E-File)

Karen E. Armijo, NA-LA, (E-File) Craig S. Leasure, PADOPS, (E-File) William R. Mairson, ADESH, (E-File) John C. Bretzke, ADESH, (E-File) Enrique Torres, EPC-DO, (E-File)

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ENCLOSURE 1

United States Environmental Protection Agency Discharge Monitoring Report – Quality Assurance Study 38 Results

EPC-DO: 18-XXX

LA-UR-18-XXXX

Date:_____



United States Environmental Protection Agency

Office of Enforcement and Compliance Assurance 1200 Pennsylvania Ave NW, Mail Code 2227A Washington, DC 20460

DMR-QA Study 38

(This data is collected under the authority of Section 308 of the Clean Water Act.)

NPDES Permittee Data Report Form

Attention: Follow the instructions on the previous page to complete this form and submit data for evaluation

Due August 31, 2018	State	NPDES Permit Number	Permit Extension
D'44 N	NM	0028835	
Permittee Name			
Los Alamos National Laboratory, LLC			
Current Permittee Mailing Address			
PO Box 1663			
City		State Z	ip Code
Los Alamos		NM 8	7545
Phone Number Fax Num	nber	E-mail	
+1 (505) 665-4644 +	1 (505) 412-9858	pvc123@me.com	
Optional: If WP Study was used, list PT Provider r	name(s):	Optional: WP Study Num	ber(s)
t			
Yes No Pertification Certification certify under penalty of law that this document and designed to assure that qualified personnel properly who manage the system, or those persons directly reconvolled and belief, true, accurate, and complete.	n by Permit Holder or (as per 40 CFR Sec d all attachments were programmer of gather and evaluate the esponsible for gathering of Fach reported value was	r Authorized Representative tion 122.22) epared under my direction or sup information submitted. Based on the information, the information	pervision in accordance with a system in my inquiry of the person or persons submitted is, to the best of my
NPDES) permit. Neither I nor any of my subordinate aboratory before we reported our results to the U.S. he possibility of fine and imprisonment for knowing	rance monitoring data re s compared our results w EPA. I am aware that ther	quired under our National Polluta	ant Discharge Elimination System
Name of Certifying Official		Title	
Taunia Van Valkenburg		Group Leader	
iignature		Date	
ddress, phone number and e-mail of certifying official are requiddress	uired if different from above.	DI M	
PO Box 1663, MSK490		Phone Number	
av.	nto 7:- C- I		(505) 665-9827
Los Alemos	ate Zip Code NM 87545	E-mail	
		tauniav@lanl.gov	· ·



United States Environmental Protection Agency

Office of Enforcement and Compliance Assurance 1200 Pennsylvania Ave NW, Mail Code 2227A Washington, DC 20460

DMR-QA Study 38

(This data is collected under the authority of Section 308 of the Clean Water Act.)

Permittee Name		State	NPDES	Permit N	lo.	Perm	it Extension
Los Alamos National Labo	ratory, LLC	NM		0028835			
Identification of	fall CHEM, MICRO and WET labor	ratories who pe	rforme	d analy	ses for	this pe	ermit
Name of Laboratory	Address of Laboratory	U.S. EPA Lab Code		b Analy pox(es) th	Lab Type*	State- certified	
			Chem	Micro	WET	туре	Lab**
GEL Laboratories	2040 Savage Rd Charleston, SC 29407	SC00012	X			С	\times
Pacific EcoRisk	2250 Cordilla Road Fairfield, CA 94534	CA01307			\boxtimes	С	\times
New Mexico Water Testing Laboratory	401 North Cornado Avenue Espanola, NM 87532	NM00953		X		С	
Los Alamos National Laboratory	P.O. Box 1663 Los Alamos, NM 87545		\boxtimes			F	
* Lab Types: C ** See Footnote on pa	S = Commercial F = Federal G = Local G = Local G = Local G = 2 (Frequently Asked Questions) for	Government = the current list of	Industri states w	al $O = C$ with lab a	other S	= State	ograms

If you need additional space, please make a copy of this page for additional laboratories.

Chemistry/Microbiology Analyte Checklist

DMR-QA Study 38 Laboratory's Graded Result Method Number Analyte determined by Analyte Test Test Required Not Acceptable Used (optional) state-certified lab* Acceptable (Corrective Action Required) Microbiology E. coli., MF or MPN Fecal Coliform, MF or MPN Total Coliform, MF or MPN Trace Metals Aluminum × × Antimony Arsenic × × Barium Beryllium Cadmium × × Chromium, total × × Chromium, hexavalent × × Cobalt Copper × × Iron × × Lead × × Manganese Mercury × × Mercury (Low Level) × X Molybdenum Nickel × X Selenium × × Silver Thallium Vanadium Zinc × × Demands 5-day BOD × 5-day Carbonaceous BOD COD X TOC Minerals Alkalinity, total (CaCO3) Chloride Fluoride Hardness, total (CaCO₃) × × Specific conductance (25°C) Sulfate Total Dissolved Solids (180°C) Nutrients Ammonia as N Nitrate as N Nitrite as N Orthophosphate as P Total Kjeldahl-Nitrogen as N Total Phosphorus as P × × Misc. Analytes Non-Filterable Residue (TSS) × Oil and Grease × × × Total Cyanide X × Total Phenolics (4-AAP) Total Residual Chlorine Total Residual Chlorine (Low Level) × × Settleable Solids Turbidity Name Patricia Vardaro-Charles Signature Date 8/28/2018

* See Footnote on page 2.

WET Analyte Checklist

DMR-QA Study 38

Analyte				Laborator	y's Graded Result	Analyte
Number	Organism / Conditions	Endpoint	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	determined b state-certified lab*
	e 13 (refer to EPA Method 2000.0)					
754	Fathead minnow (Pimephales promelas) - MHSF 25°C	LC50				
	e 14 (refer to EPA Method 2000.0)					
755	Fathead minnow (Pimephales promelas) - 20% DMW	LC50				
	e 15 (refer to EPA Method 1000.0)					
756	Fathead minnow (Pimephales promelas) - MHSF	NOEC SURVIVAL	×	×		П
808	Fathead minnow (Pimephales promelas) - MHSF	IC25** (ON) GROWTH				
810	Fathead minnow (Pimephales promelas) - MHSF	NOEC (ON) GROWTH	×	×		
Test Code	: 16 (refer to EPA Method 1000.0)					
759	Fathead minnow (Pimephales promelas) - 20% DMW	NOEC SURVIVAL			П	
8 12	Fathead minnow (Pimephales promelas) - 20% DMW	IC25** (ON) GROWTH				
	Fathead minnow (Pimephales promelas) - 20% DMW	NOEC (ON) GROWTH				
	19 (refer to EPA Method 2002.0)					
764	Ceriodaphnia dubia - MHSF 25°C	LC50				
Test Code	20 (refer to EPA Method 2002.0)					
765	Ceriodaphnia dubia - 20% DMW 25°C	LC50				
	21 (refer to EPA Method 1002.0)	2230				<u> </u>
	Ceriodaphnia dubia - MHSF	NOEC SURVIVAL		-		
	Ceriodaphnia dubia - MHSF	IC25** REPRODUCTION	×	×		
	Ceriodaphnia dubia - MHSF					
	22 (refer to EPA Method 1002.0)	NOEC REPRODUCTION	×	×		
	Ceriodaphnia dubia - 20% DMW	NOSC SURVINA				
	Ceriodaphnia dubia - 20% DMW	NOEC SURVIVAL				
	Cerìodaphnia dubia - 20% DMW	IC25** REPRODUCTION				
	32 (refer to EPA Method 2021.0)	NOEC REPRODUCTION				
	Daphnia magna - MHSF 25°C					
	38 (refer to EPA Method 2021.0)	LC50	×	×		
	Daphnia pulex - MHSF 25°C	LC50				
	42 (refer to EPA Method 2007.0)					
	Mysid (Americamysis bahia, Mysidopsis bahia) 25°C	LC50				
	43 (refer to EPA Method 1007.0)					
	Mysid (Americamysis bahia, Mysidopsis bahia)	NOEC SURVIVAL				
	Mysid (Americamysis bahia, Mysidopsis bahia)	IC25** (ON) GROWTH				
	Nysid (Americamysis bahia, Mysidopsis bahia)	NOEC (ON) GROWTH				
	4 (refer to EPA Method 2006.0)					
	nland silverside (<i>Menidia berylina</i>) 25°C	LC50				П
	5 (refer to EPA Method 1006.0)					
	nland silverside (<i>Menidia berylina</i>)	NOEC SURVIVAL				
	nland silverside (<i>Menidia berylina</i>)	IC25** (ON) GROWTH				
	nland silverside (Menidia berylina)	NOEC (ON) GROWTH	6	THE		
	6 (refer to EPA Method 2004.0)					
	heepshead minnow (Cyprinodon variegatus) 25°C	LC50				
st Code 4	7 (refer to EPA Method 1004.0)					
5 SI	heepshead minnow (Cyprinodon variegatus)	NOEC SURVIVAL				
	heepshead minnow (Cyprinodon variegatus)	IC25** (ON) GROWTH	片十			
	neepshead minnow (Cyprinodon variegatus)	NOEC (ON) GROWTH				

Name Patricia Vardaro-Charles

Signature

Date 8/28/2018

^{*}See Footnote on page 2.



Patricia Vardaro-Charles Los Alamos National Laboratory PO Box 1663 MSK490 Los Alamos, NM 87545-0001 USA



NPDES Permit: NM0028355

DMR-QA Study

Open Date: 03/23/18

Close Date: 07/06/18

Report Issued Date: 08/03/18



August 3, 2018

Patricia Vardaro-Charles Los Alamos National Laboratory PO Box 1663 MSK490 Los Alamos, NM 87545-0001

Enclosed is your final report for ERA's DMR-QA 38 Proficiency Testing study. Please note that reports were sent on your behalf to your state or regional DMR-QA coordinator. As the permit holder, you are required to review and sign the attached EPA forms and checklists and forward them to your DMR-QA coordinator by August 31, 2018. Your coordinator's contact information is provided below.

All analytes in ERA's DMR-QA 38 Proficiency Testing study have been evaluated by comparing the reported result to the acceptance limits generated using the criteria contained in the most current TNI FoPT tables.

If you have any "Not Acceptable" evaluations for the DMR-QA 38 study, a letter of corrective action and an order form for the required remedial samples are attached for your convenience. If you have a "Not Acceptable" evaluation, but there is not an order form or a list of standards for your in-house or outside laboratories, ERA recommends that you contact your DMR-QA coordinator for their corrective action requirements, if any.

Thank you for your participation in ERA's DMR-QA 38 Proficiency Testing study. If you have any questions, please contact the Proficiency Testing Department at 1-800-372-0122.

Your DMR-QA coordinator is:

New Mexico Environment Department Barbara Cooney Surface Water Quality Bureau Harold Runnels Building N 2050 1190 South St. Francis Dr., PO Box 5469 Santa Fe, NM 87505

Phone: 505-827-0212 Fax: 505-827-0161

barbara.cooney@state.nm.us

Sincerely,

Matthew Seebeck Quality Officer

attachments



DMR-QA 38 Definitions & Study Discussion

Study Dates: 03/23/18 - 07/06/18 Report Issued: 08/03/18

DMRQA Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the current FoPT tables. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current TNI FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable = Reported Value falls within the

Acceptance Limits.

Not Acceptable = Reported Value falls outside the

Acceptance Limits.

No Evaluation = Reported Value cannot be evaluated.

Not Reported = No Value reported.

The Method Description is the method the laboratory reported to ERA.

DMRQA Study Discussion

ERA's DMR-QA 38 Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI PT Standards and the criteria contained in the current TNI FoPT tables.

ERA's DMR-QA 38 study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in ththe 2009 TNI PT Standard and the criteria contained in the current TNI Fields of Proficiency Testing (FoPT) tables.

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's DMR-QA 38 study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's DMRQA Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122.







Study: **DMR-QA 38**

NPDES Permit #: **NM0028355**

Laboratory Name: Los Alamos National

Laboratory

Inorganic Results







DMR-QA 38 Final Report

NPDES Permit #: NM0028355

Permit Holder: Patricia Vardaro-Charles

NPDES Program Lead

Los Alamos National Laboratory

Bikini Atoll Road SM-30 Los Alamos, NM 87545

(505) 665-4644

	(505) 665-4644										
TNI Analyte Code	Analyte	Units	Performance Evaluation	Reported Value	Assigned Value	Acceptance Limits	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study
DMRQA Hardness (cat# 580, lot# Q038-507)											
1960	Total Suspended Solids	mg/L	Acceptable	87	88.4	72.7 - 98.1	SM 2540 D-2011 2011	86.9	3.54	SC00012	DMRQA38
DMRQA I	Hardness (cat# 580, lot# Q038-507)										
1755	Total Hardness as CaCO3	mg/L	Acceptable	297	301	256 - 346	SM 2340 B-2011 2011	300	10.0	SC00012	DMRQA38
DMRQA I	Hardness (cat# 580, lot# Q038-507)										
1960	Total Suspended Solids	mg/L	Acceptable	87	88.4	72.7 - 98.1	EPA 160.2 1979	86.9	3.54	SC00012	DMRQA38
DMRQA į	oH (cat# 577, lot# Q038-977)										
1900	рН	S.U.	Not Acceptable	7.9	8.16	7.96 - 8.36	SM 4500-H+ B-2011 2011	8.14	0.108	NM00953	DMRQA38
DMRQA (DMRQA Complex Nutrients (cat# 579, lot# Q038-525)										
1910	Total phosphorus as P	mg/L	Acceptable	9.4	8.66	7.22 - 10.0	EPA 365.4 1974	8.67	0.445	SC00012	DMRQA38
DMRQA (Complex Nutrients (cat# 579, lot# Q038	3-525)									
1910	Total phosphorus as P	mg/L	Acceptable	9.4	8.66	7.22 - 10.0	SM 4500-P H-2011 2011	8.67	0.445	SC00012	DMRQA38
DMRQA I	Demand (cat# 578, lot# Q038-516)										
1530	BOD	mg/L	Acceptable	109	107	57.4 - 156	SM 5210 B-2011 2011	107	20.2	SC00012	DMRQA38
1565	COD	mg/L	Acceptable	172	173	138 - 201	EPA 410.4	172	11.2	SC00012	DMRQA38
DMRQA I	Demand (cat# 578, lot# Q038-516)										
1530	BOD	mg/L	Acceptable	109	107	57.4 - 156	EPA 405.1 1974	107	20.2	SC00012	DMRQA38
1565	COD	mg/L	Acceptable	172	173	138 - 201	SM 5220 D-2011 2011	172	11.2	SC00012	DMRQA38
DMRQA I	Demand (cat# 578, lot# Q038-516)										
1565	COD	mg/L	Acceptable	172	173	138 - 201	HACH 8000	172	11.2	SC00012	DMRQA38





U426801

08/03/18

03/23/18 - 07/06/18

ERA Customer Number:

Report Issued:

Study Dates:

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DMR-QA 38 Final Report

NPDES Permit #: NM0028355

Permit Holder: Patricia Vardaro-Charles

NPDES Program Lead

Los Alamos National Laboratory

Bikini Atoll Road SM-30 Los Alamos, NM 87545

(505) 665-4644

			· · · · · ·	,		I						
TNI Analyte Code	Analyte	Units	Performance Evaluation	Reported Value	Assigned Value	Acceptance Limits	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study	
DMRQA Oil & Grease (cat# 582, lot# Q038-518)												
1803	n-Hexane Extractable Material(O&G)(Grav)	mg/L	Acceptable	145	157	115 - 179	EPA 1664A 1999	139	13.4	SC00012	DMRQA38	
DMRQA (DMRQA Oil & Grease (cat# 582, lot# Q038-518)											
1803	n-Hexane Extractable Material(O&G)(Grav)	mg/L	Acceptable	145	157	115 - 179	EPA 1664B 2010	139	13.4	SC00012	DMRQA38	
DMRQA 1	Trace Metals (cat# 586, lot# Q038-500)											
1000	Aluminum	μg/L	Acceptable	2500	2380	1980 - 2720	EPA 200.8 5.4 1994	2400	151	SC00012	DMRQA38	
1010	Arsenic	μg/L	Acceptable	112	110	80.9 - 140	EPA 200.8 5.4 1994	108	5.87	SC00012	DMRQA38	
1030	Cadmium	μg/L	Acceptable	395	389	331 - 447	EPA 200.8 5.4 1994	389	14.1	SC00012	DMRQA38	
1040	Chromium	μg/L	Acceptable	121	116	98.6 - 133	EPA 200.8 5.4 1994	118	5.89	SC00012	DMRQA38	
1055	Copper	μg/L	Acceptable	480	476	405 - 547	EPA 200.8 5.4 1994	478	17.5	SC00012	DMRQA38	
1070	Iron	μg/L	Acceptable	1190	1140	969 - 1310	EPA 200.8 5.4 1994	1160	45.3	SC00012	DMRQA38	
1075	Lead	μg/L	Acceptable	833	786	668 - 904	EPA 200.8 5.4 1994	790	35.1	SC00012	DMRQA38	
1105	Nickel	μg/L	Acceptable	1210	1130	997 - 1270	EPA 200.8 5.4 1994	1140	46.7	SC00012	DMRQA38	
1140	Selenium	μg/L	Acceptable	269	259	220 - 298	EPA 200.8 5.4 1994	259	13.4	SC00012	DMRQA38	
1190	Zinc	μg/L	Acceptable	622	609	518 - 700	EPA 200.8 5.4 1994	612	26.2	SC00012	DMRQA38	
DMRQA I	Mercury (cat# 574, lot# Q038-514)											
1095	Mercury	μg/L	Acceptable	30.7	27.7	19.4 - 36.0	EPA 1631E 2002	27.5	2.46	SC00012	DMRQA38	
DMRQA I	Mercury (cat# 574, lot# Q038-514)											
1095	Mercury	μg/L	Acceptable	26.6	27.7	19.4 - 36.0	EPA 245.2 1983	27.5	2.46	SC00012	DMRQA38	
DMRQA I	Mercury (cat# 574, lot# Q038-514)											
1095	Mercury	μg/L	Acceptable	26.6	27.7	19.4 - 36.0	EPA 245.1 3 1994	27.5	2.46	SC00012	DMRQA38	
DMRQA I	Mercury (cat# 574, lot# Q038-514)											
1095	Mercury	μg/L	Acceptable	26.6	27.7	19.4 - 36.0	EPA 7470A 1 1994	27.5	2.46	SC00012	DMRQA38	





U426801

08/03/18

03/23/18 - 07/06/18

ERA Customer Number:

Report Issued:

Study Dates:

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DMR-QA 38 Final Report

NPDES Permit #: NM0028355

Permit Holder: Patricia Vardaro-Charles

NPDES Program Lead

Los Alamos National Laboratory

Bikini Atoll Road SM-30 Los Alamos, NM 87545

(505) 665-4644

			(555	7) 003-404	•						
TNI Analyte Code	Analyte	Units	Performance Evaluation	Reported Value	Assigned Value	Acceptance Limits	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study
DMRQA F	DMRQA Hexavalent Chromium (cat# 898, lot# Q038-984)										
1045	Hexavalent Chromium	μg/L	Acceptable	686	740	623 - 847	SM 3500-Cr B-2011 2011	736	34.6	SC00012	DMRQA38
DMRQA I	DMRQA Hexavalent Chromium (cat# 898, lot# Q038-984)										
1045	Hexavalent Chromium	μg/L	Acceptable	686	740	623 - 847	EPA 7196A 1 1992	736	34.6	SC00012	DMRQA38
DMRQA 1	Total Cyanide (cat# 588, lot# Q038-502))									
1645	Cyanide, total	mg/L	Acceptable	0.605	0.605	0.393 - 0.817	SM 4500-CN C-2011 2011	0.594	0.0578	SC00012	DMRQA38
DMRQA 1	Total Cyanide (cat# 588, lot# Q038-502))									
1645	Cyanide, total	mg/L	Acceptable	0.605	0.605	0.393 - 0.817	EPA 335.4 1993	0.594	0.0578	SC00012	DMRQA38
DMRQA 1	Total Cyanide (cat# 588, lot# Q038-502))									
1645	Cyanide, total	mg/L	Acceptable	0.605	0.605	0.393 - 0.817	EPA 9012B 2002	0.594	0.0578	SC00012	DMRQA38
DMRQA L	DMRQA Low-Level Total Residual Chlorine (cat# 881, lot# Q038-917)										
1940	Low Level Total Residual Chlorine	μg/L	Not Acceptable	130	199	139 - 259	SM 4500-Cl G-2011 2011	199	21.4	NM00953	DMRQA38





U426801

08/03/18

03/23/18 - 07/06/18

ERA Customer Number:

Report Issued:

Study Dates:

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USEPA DMR-QA 38

NPDES PERMITTEE DATA REPORT FORM



A Waters Company

	. 04 0040	USEPA NPDES	NM0028355		
Due Augus	t 31, 2018	Permit #:		Permit Ex	rt:
		i Grillie ii.			
Permittee Name:	Los Alamos National	Laboratory			
Facility Address:	Bikini Atoll Road SM	-30			
r domey Address.	Dikini Aton Koda om				
Citv:	Los Alamos		State: NM	Postal Code: 87	7545
Phone Number:	(505) 665-4644		Fax Number:		
	-	-		- -	
E-mail address:	vardaro@lanl.gov				
Optional: If WP study was used, list PT provider name:			Option	al: WP study number(s):	
For DMRQA-38, cor	ducted in 2018, the P	ermittee ensured that th	neir laboratory(s) pe	erforming the required an	alyses:
Received PT S	amples	Submitted Complet	e and Accurate Dat	a Received	a Graded Report by
	•	by July 6, 2018		August 3	, 2018
Yes □ No	П	Yes □ No □	7	Yes 🗀	No □
	Ь			_	
	1	Certification by Permit I		•	
I certify under penalty o	f law that this document ar	` '	0 C.F.R. Section 122.22 ared under my direction	<i>'</i>	vith a system designed to assure that
qualified personnel prop	erly gather and evaluate ti	ne information submitted. Ba	ised on my inquiry of the	e person or persons who mana	ge the system, or those persons directly nplete. Each reported value was
produced from a single	analytical run using the an	alytical system that rountinely	performs these analys	es to produce compliance mon	itoring data required under our National
					nt analyses conducted by us or any mation, including the possibility of fine
and imprisonment for kr				gg	
Name of					
Certifying Official:	Patricia Vardaro-Cha	ırles	Ti	tle: NPDES Program Lea	d
Signature:				Date Signed	d: / /
Mailing Address:	PO Box 1663				
_					
(enter only if different from address above)					
	MSK490				
City:	Los Alamos		State: NM	Postal Code: 87	7545-0001
•					
Phone Number:	(505) 665-4644		E-mail address:	vardaro@lanl.gov	
	-	-			

United States

ENVIRONMENTAL PROTECTION AGENCY

Laboratory Performance Evaluation
Laboratory DMR-QA Evaluation Study 38

USEPA NPDES Permit #: NM0028355 Permit Ext:

<u></u>									
Identification of all CHEM, MICRO and TOX laboratories who did analyses for this permit									
Name of Laboratory	Address of Laboratory	U.S. EPA Lab Code		o Analy k box(es apply	Lab	State- certified			
j	,	Code	CHEM	MICRO	тох	Type*	Lab**		
GEL Laboratories, LLC	2040 Savage Rd. Charleston,SC 29407	SC00012		30 10	32		(II) (II) (II) (II) (II) (II) (II) (II)		
Los Alamos National Laboratory	PO Box 1663 MS K490 Los Alamos,NM 87545	NM00953			30 0				

Ver. 1 Page 10 of 18

Permittee Name: Los Alamos National Laboratory Permit Number: NM0028355 EPA Lab Code: NM00953

Chemistry/Microbiology Analyte Checklist

		Laborate	ory's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
<u>Minerals</u>				
Alkalinity as CaCO3				
Chloride				
Conductivity at 25°C				
Fluoride				
Potassium				
Sodium Sulfate				
Total Dissolved Solids at 180°C				
Total Solids at 105°C				
Hardness Hardness				
Total Suspended Solids				
Calcium				
Magnesium				
Calcium Hardness as CaCO3				
Total Hardness as CaCO3				
<u>pH</u>				
pH				
SM 4500-H+ B-2011			X	
Settleable Solids				
Settleable Solids				
Solids Concentrate				
Total Suspended Solids				
Total Dissolved Solids at 180°C				
Total Solids at 105°C				
Solids				
Total Suspended Solids				
Total Dissolved Solids at 180°C				
Total Solids at 105°C Simple Nutrients				
Ammonia as N Nitrate + Nitrite as N				
Nitrate as N				
ortho-Phosphate as P				
Complex Nutrients				
Total Kjeldahl Nitrogen				
Total phosphorus as P				
Nitrite				
Nitrite as N				
Demand				
BOD				
CBOD				
COD				
TOC				

Ver. 1 Page 11 of 18

Permittee Name: Los Alamos National Laboratory Permit Number: NM0028355 EPA Lab Code: NM00953

Chemistry/Microbiology Analyte Checklist

		Laborato	ory's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
Oil & Grease Concentrate				
n-Hexane Extractable Material(O&G) (Grav)				
Oil & Grease				
n-Hexane Extractable Material(O&G) (Grav) n-Hexane Extractable Material(O&G) (IR)				
Trace Metals				
Aluminum Antimony Arsenic Barium Beryllium Boron				
Cadmium				
Chromium Cobalt				
Copper				
Iron				
Lead				
Manganese				
Molybdenum				
Nickel Selenium				
Silver				
Strontium				
Thallium				
Vanadium				
Zinc				
Mercury				
Mercury				
Low-Level Mercury				
Low Level Mercury Hexavalent Chromium				
Hexavalent Chromium Turbidity				
-				
Turbidity Total Cyanide				
-				
Cyanide, total				
Amenable Cyanide Total Phenolics (4-AAP)				
Phenolics, total				
FIICHUICS, WICH				

Ver. 1 Page 12 of 18

Permit Number: NM0028355 Permittee Name: Los Alamos National Laboratory EPA Lab Code: NM00953

Chemistry/Microbiology Analyte Checklist

		DMRQA Study 38	3	
		Laborato	ory's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
Total Residual Chlorine				
Total Residual Chlorine				
Low-Level Total Residual Chlorine				
Low Level Total Residual Chlorine SM 4500-Cl G-2011			×	
WasteWatR™ Coliform MicrobE™				
Total Coliforms (MF) Fecal Coliforms (MF) E.coli (MF) Total Coliforms (MPN) Fecal Coliforms (MPN) E.coli (MPN)				
WasteWatR™ Coliform MicrobE™ - SM				
9221 Total Coliforms (MPN) Fecal Coliforms (MPN) E.coli (MPN)				
Print Name			Date	

Signature/Title

Use a separate checklist for EACH lab used

Ver. 1 Page 13 of 18

Permittee Name: Los Alamos National Laboratory Permit Number: NM0028355 EPA Lab Code: SC00012

Chemistry/Microbiology Analyte Checklist

	Ι	I shorete		
		Laborato	ry's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
<u>Minerals</u>				
Alkalinity as CaCO3 Chloride Conductivity at 25°C Fluoride Potassium Sodium Sulfate Total Dissolved Solids at 180°C Total Solids at 105°C				
<u>Hardness</u>				
Total Suspended Solids SM 2540 D-2011 EPA 160.2		X X		
Calcium Magnesium Calcium Hardness as CaCO3 Total Hardness as CaCO3 SM 2340 B-2011		X		
<u>pH</u>	Ц			
pH				
Settleable Solids				
Settleable Solids				
Solids Concentrate				
Total Suspended Solids Total Dissolved Solids at 180°C Total Solids at 105°C				
Solids Total Suspended Solids Total Dissolved Solids at 180°C Total Solids at 105°C				
Simple Nutrients				
Ammonia as N Nitrate + Nitrite as N Nitrate as N ortho-Phosphate as P				
Complex Nutrients				
Total Kjeldahl Nitrogen Total phosphorus as P EPA 365.4		□	П	П
SM 4500-P H-2011				
Nitrite	<u> </u>	[23]		<u>u</u>
Nitrite as N				

Ver. 1 Page 14 of 18

Permittee Name: Los Alamos National Laboratory Permit Number: NM0028355 EPA Lab Code: SC00012

Chemistry/Microbiology Analyte Checklist

		Laboratory	y's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
<u>Demand</u>				
BOD				
SM 5210 B-2011		X		
EPA 405.1		X		
CBOD				
COD EPA 410.4		X		
SM 5220 D-2011		X		
HACH 8000				
TOC			<u>U</u>	
Oil & Grease Concentrate				
n-Hexane Extractable Material(O&G) (Grav)				
Oil & Grease				
n-Hexane Extractable Material(O&G) (Grav)	_	_	<u>_</u>	_
ÈPA 1664A		\boxtimes		
EPA 1664B	Ш	X	Ш	Ш
n-Hexane Extractable Material(O&G) (IR) Trace Metals				
Aluminum EPA 200.8		\boxtimes		
Antimony			U	
Arsenic				
EPA 200.8		☒		
Barium Beryllium Boron Cadmium				
EPA 200.8		X		
Chromium				
EPA 200.8		X		
Cobalt				
Copper EPA 200.8		\boxtimes		
Iron			<u> </u>	
EPA 200.8		X		
Lead		_		
EPA 200.8		X		
Manganese Molybdenum Nickel				

Ver. 1 Page 15 of 18

Permittee Name: Los Alamos National Laboratory Permit Number: NM0028355 EPA Lab Code: SC00012

Chemistry/Microbiology Analyte Checklist

		Laborator:	y's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
EPA 200.8		X		
Selenium EPA 200.8		\boxtimes		
Silver Strontium Thallium Vanadium Zinc				
EPA 200.8		\boxtimes		
<u>Mercury</u>				
Mercury EPA 1631E EPA 245.2 EPA 245.1 EPA 7470A		X X X X		
Low-Level Mercury	<u> </u>	[23]		
Low Level Mercury				
Hexavalent Chromium				
Hexavalent Chromium SM 3500-Cr B-2011 EPA 7196A		X X		
Turbidity				
Turbidity				
Total Cyanide				
Cyanide, total SM 4500-CN C-2011 EPA 335.4 EPA 9012B Amenable Cyanide	0 0 0	X X X		
Total Phenolics (4-AAP)				
Phenolics, total Total Residual Chlorine				
Total Residual Chlorine Low-Level Total Residual Chlorine				
Low Level Total Residual Chlorine <u>WasteWatR™ Coliform MicrobE™</u>				
Total Coliforms (MF) Fecal Coliforms (MF) E.coli (MF) Total Coliforms (MPN) Fecal Coliforms (MPN) E.coli (MPN)				

Ver. 1 Page 16 of 18

Permittee Name: Los Alamos National Laboratory Permit Number: NM0028355 EPA Lab Code: SC00012

Chemistry/Microbiology Analyte Checklist

		Laboratory	's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
WasteWatR™ Coliform MicrobE™ - SM				
9221				
Total Coliforms (MPN)				
Fecal Coliforms (MPN)				
E.coli (MPN)				

Print Name	Date	
Signature/Title	Use a separate checklist for EACH lab u	used



DMR-QA 38 Corrective Action Guidelines

Permit Holders

Upon reviewing your enclosed DMR-QA 38 final report, you may notice that some results have been evaluated as 'Not Acceptable'. For these analytes, the USEPA's DMR-QA 38 announcement letter directs permit holders to "follow up with the laboratory to determine the cause of the result and take corrective action to prevent future occurrences". Permittees must identify and report to the state DMR-QA coordinator causes and system changes to correct the discrepancies. The corrective action report must be sent to the coordinator before October 26, 2018. This means that for all 'Not Acceptable' evaluations, the laboratory must conduct an investigation, identify the problem and implement adequate corrective actions. Your state may also require the laboratory to analyze a remedial QC or PT Sample as a demonstration that the corrective action implemented was successful. ERA has contacted all state and regional coordinators and determined the type of remedial samples that they recommend or require.

If any of your 'Not Acceptable' results originated from your in-house laboratory, an order form is enclosed listing the standards that you should order and analyze. Your in-house laboratory will need to conduct its' investigation and then analyze the listed standards to ensure that the identified problem has been corrected. The corrective action report and, if applicable, the results of the analysis will then need to be forwarded to your DMR-QA coordinator by October 26, 2018.

You may receive an order form for both your in-house standards that have analytes evaluated as 'Not Acceptable', as well as a list of standards that your outside or contract laboratory(ies) have with 'Not Acceptable' evaluations. Some agencies require corrective action on a case by case basis. If you have a "Not Acceptable" evaluation, but there is not an order form or a list of standards for your in-house or outside laboratories, ERA recommends that you contact your DMR-QA coordinator for their corrective action requirements, if any.

The standards listed in the attachments are based on general guidance given to us by the state or regional coordinators. If you have any questions about your specific corrective action requirements, please contact your state or regional coordinator directly.

If you have any questions or to place an order, please contact ERA's Customer Service Group at 1-888-372-0122.



DMR-QA 38 Corrective Action FAX Back Order Form

DATE: 07/31/2018 **Customer Number: U426801**

BILL TO: Los Alamos National Laboratory	SHIP TO: Los Alamos National Laboratory
PO Box 1663	Bikini Atoll Road SM-30
MS K490	TA-590116 01U
Los Alamos, NM 87545	Los Alamos, NM 87545
ATTENTION: Patricia Vardaro-Charles	ATTENTION: Patricia Vardaro-Charles

2. total does not include shipping, handling, and taxes (if applicable).

QUANTITY	CATALOG NUMBER	DESCRIPTION	ON	UNIT PRICE	EXTENDED PRICE
1	577	WP-283 - pH (Study Closes 9/27)		75.00	75.00
1	881	WP-283 - Low-Level Total Residua 9/27)	Chlorine (Study Closes	84.00	84.00
			SHIPPING		35.00
			HANDLING	ì	10.00
			ESTIMATED TOTAL (SALES TAX NOT IN		204.00

3.	Complete ordering and payment information.	You will be billed only when your standards ship.
	Ordered By:	We are pleased to accept credit cards. To place your secure order, please
	Ordered By Signature:	call our Waters ERA Customer Service team at 800.372.0122 to provide your credit card information or visit www.eraqc.com to place your order.
	Phone:	Method of Payment:
	Email:	PO #:
		Credit Card: □ VISA □ MASTERCARD □ AMEX □ DISCOVER
4.	Fax this order form to ERA at 303-421-0159.	Questions? Call 1-888-372-0122





6390 Joyce Drive # 100 Golden, CO 80403

Phone 303-940-0033 Fax 866-283-0269 www.phenova.com

August 3, 2018

Ms. Krista Prosser Pacific EcoRisk 2250 Cordelia Road Fairfield, CA 94534 USA

Dear Krista,

Thank you for participating in the DMRQA38-WET DMRQA PT Study. Enclosed is your final report, which has been carefully reviewed by the PT specialists at Phenova.

For any analyte falling outside the established acceptance limits, our PT management staff would like to assist you in determining the most appropriate course of corrective action for your facility. Please contact us at any time if we may be of service to you. A final report for your laboratory will be sent to all accrediting agencies you requested at the time of data submittal.

Thank you again for participating in the DMRQA38-WET DMRQA PT Study. We appreciate working with you and look forward to our next study. If you have any questions, please call us at 303-940-0033.





Golden, CO 80403

Phone 303-940-0033 Fax 866-283-0269 www.phenova.com

Report Definitions:

Assigned Value

The Assigned Value is determined from the study mean, gravimetric and volumetric true concentration of an analyte to be analyzed, calculation and/or an appropriate reference value as stipulated in the EPA National Standards for Water Proficiency Testing Studies Criteria Document (current version), the National Environmental Laboratory Accreditation Conference (NELAC) criteria (ref: NELAC FOT tables, NELAC PT Committee) and other documents distributed by accrediting

agencies as applicable.

Evaluation Limits Acceptance Limits are derived from fixed limits, coefficients, constants

and calculations stipulated in the EPA National Standards for Water Proficiency Testing Studies Criteria Documents (current version), the National Environmental Laboratory Accreditation Conference (NELAC) criteria (ref: NELAC PT FOT tables, NELAC PT Committee) and other

documents distributed by accrediting agencies as applicable.

Evaluation

Acceptable The reported value falls within the Acceptance Limits.

Not Acceptable The reported value falls outside the Acceptance Limits.

No Evaluation The reported value is non-numeric and can not be evaluated.

NR As required by the NELAC standards and requested by state

authorities, any analyte purchased but not reported by your facility is

listed as NR (Not Reported).





Phone 303-940-0033 866-283-0269 www.phenova.com

100 Golden, CO 80403

Final Report - DMRQA PT Study: DMRQA38-WET

Opening Date: March 23, 2018 - Closing Date: July 6, 2018

Facility: Pacific EcoRisk 2250 Cordelia Road Fairfield, CA 94534

Ms. Krista Prosser, Quality Assurance Manager

707-207-7767 CA01307

EPA Lab ID:

	USA	NPDES Permit I	D;					
Fath	nead Minnow Method 13 (PT-13-WET)		170 1			-	Lot #	#: 8540-13
ELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3410	Fathead Minnow Acute MHSF 25° - LC50	10213408	EPA 2000.0 - Fathead minnow, 48-hr Acule, nonrenewal, MHSF 20deg C Rev,5th Ed 2002	S.U.	34.1	35.4	20.9 - 47.3	Acceptable
Fath	nead Minnow Method 15 (PT-15-WET)						Lot #	#: 8540-1
IELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3410	Fathead Minnow Chronic MHSF - Survival NOEC	10214207	EPA 1000.0 - Fathead minnow, 7-day Chronic, daily renewal, MHSF 25deg C 2002	S.U.	50	50	25 - 100	Acceptable
3410	Fathead Minnow Chronic MHSF - Growth IC25 (ON)	10214207	EPA 1000 0 - Fathead minnow, 7-day Chronic, daily renewal, MHSF 25deg C 2002	S.U.	47.7	60.0	24.0 - 71.4	Acceptable
3410	Fathead Minnow Chronic MHSF - Growth NOEC (ON)	10214207	EPA 1000.0 - Fathead minnow, 7-day Chronic, daily renewal, MHSF 25deg C 2002	S.U.	25	50	12.5 - 50	Acceptable
Ceri	odaphnia Method 19 (PT-19-WET)						Lot #	: 8540-19
ELAC Code	Analyte	Melhod Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3315	Ceriodaphnia Acute MHSF 25° - LC50	10214401	EPA 2002,0 - Ceriodaphnia dubia, 48-hr Acute, renewal, MHSF 20deg C Rev,5th Ed 2002	S.U.	43.9	38.6	<6.25 - 82.3	Acceptable





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Golden, CO 80403

Phone 303-940-0033 Fax 866-283-0269 www.phenova.com

Final Report - DMRQA PT Study: DMRQA38-WET

Opening Date: March 23, 2018 - Closing Date: July 6, 2018

Facility: Pacific EcoRisk

2250 Cordelia Road Fairfield, CA 94534 USA

Contact:

Ms_Krista Prosser, Quality Assurance Manager 707-207-7767

EPA Lab ID: CA01307

		NPDES Permit II):					
Ceri	odaphnia Method 21 (PT-21-WET)	10.0	1 1 7	2.3			Lot #	#: 8540-21
IELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3315	Ceriodaphnia Chronic MHSF - Survival NOEC	10215006	EPA 1002.0 - Ceriodaphnia dubia, 7-day Chronic, daily renewal, MHSF 25°C 2002	S.U.	50	50	12,5 - 100	Acceptable
3315	Ceriodaphnia Chronic MHSF - Reproduction IC25	10215006	EPA 1002.0 - Ceriodaphnia dubia, 7-day Chronic, daily renewal, MHSF 25°C 2002	S.U.	25.3	31.8	7.04 - 43.6	Acceptable
3315	Ceriodaphnia Chronic MHSF - Reproduction NOEC	10215006	EPA 1002,0 - Ceriodaphnia dubia, 7-day Chronic, daily renewal, MHSF 25°C 2002	S.U.	25	12.5	12.5 - 50	Acceptable
Dap	hnia Method 32 (PT-32-WET)					1 1 1 1 1	Lot	#: 8540-32
IELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3350	Daphnia Magna Acute MHSF 25° - LC50	10215404	EPA 2021.0 - Daphnia magna, 48-hr Acute, nonrenewal, MHSF 20deg C Rev.5th Ed 2002	S.U.	55.0	36.6	21.5 - 88.6	Acceptable





100 Golden, CO 80403

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Final Report - DMRQA PT Study: DMRQA38-WET

Opening Date: March 23, 2018 - Closing Date: July 6, 2018

Facility: Pacific EcoRisk

2250 Cordelia Road Fairfield, CA 94534 USA

Contact:

Ms. Krista Prosser, Quality Assurance Manager 707-207-7767

EPA Lab ID: CA01307

Dap	hnia Method 38 (PT-38-WET)					-	Lot	#: 8540-31
VELAC Code		Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3355	Daphnia Pulex Acute MHSF 25* - LC50	10215608	EPA 2021.0 - Daphnia pulex, 48-hr Acute, nonrenewal, MHSF 20deg C Rev.5th Ed 2002	S,U	58.8	51,8	35.5 - 82.2	Acceptable
Mys	id Method 42 (PT-42-WET)						Lot :	#: 8540-42
IELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3395	Mysid Acute SSW 25" - LC50	10216010	EPA 2007.0 - Mysid Acute Toxicity Rev_5th Ed 2002	S.U.	30.7	34.1	17.9 - 43.5	Acceptable
Mys	id Method 43 (PT-43-WET)						Lot#	#: 8540-43
ELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3395	Mysid Chronic SSW - Survival NOEC	10254009	EPA 1007.0 - Mysid, 7-day Chronic, daily renewal, 40-fathoms SW 26deg C 2002	S,U,	25	25	12,5 - 50	Acceptable
3395	Mysid Chronic SSW - Growth IC25 (ON)	10254009	EPA 1007.0 - Mysid, 7-day Chronic, daily renewal, 40-fathoms SW 26deg C 2002	S.U.	28.8	27.1	23.9 - 33.6	Acceptable
1395	Mysid Chronic SSW - Growth NOEC (ON)	10254009	EPA 1007 0 - Mysid, 7-day Chronic, daily renewal, 40-fathoms SW 26deg C 2002	S.U.	25	25	12.5 - 50	Acceptable





100 Golden, CO 80403

Phone 303-940-0033 Fax 866-283-0269 www.phenova.com

Final Report - DMRQA PT Study: DMRQA38-WET

Opening Date: March 23, 2018 - Closing Date: July 6, 2018

Facility: Pacific EcoRisk 2250 Cordelia Road Fairfield, CA 94534 USA

Contact:

Ms. Krista Prosser, Quality Assurance Manager

707-207-7767

CA01307

EPA Lab ID:

	USA	NPDES Permit IC):					
Men	idia Method 44 (PT-44-WET)				- 7	- 3	Lot#	: 8540-44
IELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3380	Menidia Acute SSW 25° - LC50	10216407	EPA 2006 Inland silverside Acute 40 FSW 20°C	S.U.	43.2	36,6	24,4 - 62,1	Acceptable
Men	idia Method 45 (PT-45-WET)						Lot#	: 8540-45
NELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3380	Menidia Chronic SSW - Survival NOEC	10253802	EPA 1006,0 - Inland silverside, 7-day Chronic, daily renewal, 40-fathoms SW 25deg C 2002	S.U.	25	25	12.5 - 50	Acceptable
3380	Menidia Chronic SSW - Growth IC25 (ON)	10253802	EPA 1006 D - Inland silverside, 7-day Chronic, daily renewal, 40-falhoms SW 25deg C 2002	S.U.	29.6	32.0	24.8 - 34.4	Acceptable
3380	Menidia Chronic SSW - Growth NOEC (ON)	10253802	EPA 1006.0 - Inland silverside, 7-day Chronic, daily renewal, 40-fathoms SW 25deg C 2002	S,U,	25	25	12.5 - 50	Acceptable





Golden, CO 80403

Phone 303-940-0033 866-283-0269 Fax www.phenova.com

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Final Report - DMRQA PT Study: DMRQA38-WET

Opening Date: March 23, 2018 - Closing Date: July 6, 2018

Facility: Pacific EcoRisk 2250 Cordelia Road Fairfield, CA 94534 USA

Contact:

Ms. Krista Prosser, Quality Assurance Manager

707-207-7767

EPA Lab ID:

	epshead Minnow Method 46 (PT-46-WET)						LOL	: 8540 <u>-</u> 46
VELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3345	Sheepshead Minnow Acule SSW 25° - LC50	10216601	EPA 2004.0 - Sheepshead Minnow, 48-hr Acute, nonrenewal, 40-falhoms SW 20deg C Rev.5th Ed 2002	S.U.	25.3	17.7	<6.25 - 49.1	Acceptable
She	epshead Minnow Method 47 (PT-47-WET)						Lot #	: 8540-47
NELAC Code	Analyte	Method Code	Melhod Description	Units	Assigned Value	Result	Acceptance Limits	Evaluation
3345	Sheepshead Minnow Chronic SSW - Survival NOEC	10253404	EPA 1004.0 - Sheepshead Minnow Chronic Toxicity 2002	S.U.	25	25	12.5 - 50	Acceptable
3345 3345	Sheepshead Minnow Chronic SSW - Survival NOEC Sheepshead Minnow Chronic SSW - Growth IC25 (ON)	10253404	Sheepshead Minnow	S.U.	25	25 31 ₈ 9	12.5 - 50 24.2 - 35.6	Acceptable Acceptable

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Golden, CO 80403

Phone 303-940-0033 Fax 866-283-0269 www.phenova.com

August 3, 2018

Frank Naranjo NM Water Testing Lab Inc. 401 North Coronado Avenue Espanola, NM 87532

Dear Frank,

Thank you for participating in the DMRQA38-CHEM DMRQA PT Study. Enclosed is your final report, which has been carefully reviewed by the PT specialists at Phenova.

For any analyte falling outside the established acceptance limits, our PT management staff would like to assist you in determining the most appropriate course of corrective action for your facility. Please contact us at any time if we may be of service to you. A final report for your laboratory will be sent to all accrediting agencies you requested at the time of data submittal.

Thank you again for participating in the DMRQA38-CHEM DMRQA PT Study. We appreciate working with you and look forward to our next study. If you have any questions, please call us at 303-940-0033.





Golden, CO 80403

Phone 303-940-0033 Fax 866-283-0269 www.phenova.com

Report Definitions:

NELAC Experimental

Analytes

NELAC Experimental Analytes must be run twice a year. Due to the experimental nature of the acceptance limits, accreditation status is

not based on the evaluation received.

Assigned Value

The Assigned Value is determined from the study mean, gravimetric and volumetric true concentration of an analyte to be analyzed, calculation and/or an appropriate reference value as stipulated in the EPA National Standards for Water Proficiency Testing Studies Criteria Document (current version), the National Environmental Laboratory Accreditation Conference (NELAC) criteria (ref: NELAC FOT tables, NELAC PT Committee) and other documents distributed by accrediting

agencies as applicable.

Evaluation Limits

Acceptance Limits are derived from fixed limits, coefficients, constants and calculations stipulated in the EPA National Standards for Water Proficiency Testing Studies Criteria Documents (current version), the National Environmental Laboratory Accreditation Conference (NELAC) criteria (ref: NELAC PT FOT tables, NELAC PT Committee) and other documents distributed by accrediting agencies as applicable.

Evaluation

Acceptable

The reported value falls within the Acceptance Limits.

Not Acceptable

The reported value falls outside the Acceptance Limits.

No Evaluation

The reported value is non-numeric and can not be evaluated.

NR

As required by the NELAC standards and requested by state

authorities, any analyte purchased but not reported by your facility is

listed as NR (Not Reported).





6390 Joyce Drive # 100 Golden, CO 80403

Phone 303-940-0033 Fax 866-283-0269 www.phenova.com

Final Report - DMRQA PT Study: DMRQA38-CHEM

Opening Date: March 23, 2018 - Closing Date: July 6, 2018

Facility: NM Water Testing Lab Inc. 401 North Coronado Avenue Espanola, NM 87532

Contact:

NM00957

505-929-4545

EPA Lab ID:

NPDES Permit ID:

NELAC Code	Analyte	Method Code	Method Description	Units	Assigned Value	Result	Warning Limits	Acceptance Limits	Evaluation
Code		Code			-,,,,,				
2530	Fecal Coliform, MF			CFU/100 mL	446			73 - 2740	NR
2525	E. Coli, MF			CFU/100 mL	354			55 - 2290	NR
2530	Fecal Coliform, MPN		The state of the s	MPN/100 mL	830			320 - 2150	NR
2500	Total Coliform, MPN		*(0)	MPN/100 mL	737			152 - 3570	NR
2525	E. Coli, MPN		9223-B 2004 Colilert QuantiTray 2x by Idexx	MPN/100 mL	884	816.40		514 - 1520	Acceptable